

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image capturing device, comprising:

an electronic image sensor;

a lens for focusing an image on the electronic image sensor, the lens being positioned in a room having a door;

a memory including a frame buffer memory for storing at least one digital image frame, image processing code for identifying objects in said digital image frame, and an object-to-event mapping table having a plurality of entries, wherein an entry of said object-to-event mapping table maps a door open event to a particular object; and

a processor, said processor communicating in communication with said electronic image sensor and said memory, said processor conducting an image capture of a digital image frame into said frame buffer and extracting predetermined events in said digital image frame by comparing said digital image frame with a stored quiescent image frame said processor for determining whether said door has been opened and for performing a pre-defined action if it is determined that said door has been opened, wherein said processor is configured to determine whether said door has been opened by (a) using said image processing code to identify an object in said digital image frame, (b) using the object-to-event mapping table to determine the particular object to which the door open event is mapped, and (c) determining whether the identified object matches the particular object to which the door-open event is mapped.

2. (Currently Amended) The device of claim 1, wherein said ~~frame buffer memory~~ comprises a circular frame buffer.

3. (Currently Amended) The device of claim 1, wherein said digital image frame is discarded after said ~~one or more events are extracted~~ processor uses said image processing code to identify the objects in said digital image frame.

4. (Original) The device of claim 1, said memory further including an event storage that stores one or more events extracted from one or more digital image frames.

5. Canceled

6. (Currently Amended) The device of claim [[5]] 1, wherein said image processing ~~algorithm code~~ further includes a library of predetermined objects, with each object in said library of predetermined objects representing a predetermined event.

7. (Currently Amended) The device of claim 1, wherein said processor compares said digital image frame to [[said]] a quiescent frame and detects an event if said digital image frame is substantially different than said quiescent frame.

8. (Currently Amended) An event monitoring method, comprising the steps of:
capturing a digital image frame ~~at a predetermined capture rate;~~
storing information that maps a predefined object to a sink use event;
~~performing image analysis on said digital image frame~~ identifying an object in said digital image frame; and
~~extracting predetermined events in said digital image frame according to event data stored in a memory; and~~
~~recording the occurrence of an extracted event~~
determining whether a sink use event has occurred by determining whether the identified object matches said predefined object.

9. (Currently Amended) The method of claim 8, wherein said digital image frame is discarded after said ~~event is extracted~~ determining step.

10. (Original) The method of claim 8, further comprising the step of storing said event.

11. (Currently Amended) The method of claim 8, ~~wherein the capturing, performing, and extracting steps are iteratively performed, and~~ further comprising the step of waiting a ~~predetermined time period after the extracting step before performing a subsequent capturing step~~ after waiting a predetermined time period after the first capturing step.

12. (Currently Amended) The method of claim 8, ~~with the step of performing image analysis further comprising optically identifying an object in said digital image frame~~ wherein said step of identifying an object in said digital image frame comprises using an image processing algorithm to detect one or more objects in said digital image frame.

13. (Currently Amended) The method of claim 8, ~~with the step of performing image analysis further comprising optically identifying an object in said digital image frame and with the step of extracting an event further comprising mapping said object to an event of a set of defined events~~ wherein said information comprises an object-to-event mapping table.

14. (Currently Amended) The method of claim ~~[[8]]~~ 13, wherein said ~~processor uses an image processing algorithm to detect one or more objects in a digital image frame and~~ said determining step further comprises ~~uses accessing an the~~ object-to-event mapping table to extract one or more events corresponding to said one or more objects.

15. (Currently Amended) The method of claim 8, with the step of ~~performing image analysis~~ identifying an object in said digital image frame further comprising the step of comparing said digital image frame to a library of predetermined objects, with each object in said library of predetermined objects representing a predetermined event.

16. (Currently Amended) An event monitoring method, comprising the steps of:

capturing a quiescent frame at a beginning of an event monitoring session;

capturing a digital image frame;

comparing said digital image frame to said quiescent frame;

determining if said digital image frame ~~is substantially different from~~ includes an object that is not included in said quiescent frame; and

if said digital image frame ~~is substantially different from~~ includes an object that is not included in said quiescent frame, identifying an event by comparing said ~~difference~~ object with a stored plurality of predefined ~~events~~ objects, wherein said stored plurality of predefined objects includes an object that represents a door open event or a sink use event.

17. (Currently Amended) The method of claim 16, wherein said digital image frame is discarded after said ~~event is extracted~~ step of identifying an event.

18. (Original) The method of claim 16, further comprising the step of storing said event.

19. (Original) The method of claim 16, wherein the steps of capturing a digital image frame, comparing, and detecting are iteratively performed, and further comprising the step of waiting a predetermined time period after the detecting step before performing a subsequent capturing a digital image frame step.

20. (New) The method of claim 16, wherein said stored plurality of predefined objects includes a first object that represents a door open event and a second object that represents a sink use event.